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LADAS & PARRY
5670 WILSHIRE BOULEVARD
21ST FLOOR
LOS ANGELES, CA 90036

EXAMINER
DI GRAZIO, JEANNE A

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/529,159	Applicant(s) BRYAN-BROWN ET AL.	
	Examiner Jeanne A. Di Grazio	Art Unit 2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 January 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-44 and 46-59* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-44 and 46-59* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Priority

Priority to GB Patent Applications Nos. 9721214.6, 9721215.3, 9721229.4, and 9721256.7 (Oct. 8, 1997) is claimed.

Response to Arguments

1. The Examiner notes Applicant's submission of a Material Safety Data Sheet of Norland Products and Applicant's contention that Norland 65 does not contain esters or thiols and or acrylate monomers.
2. The Examiner thanks Applicant for having submitted an Abstract on a separate sheet as required by 37 C.F.R. 1.72(b).
3. Because Applicant has amended the noted claims to overcome the Examiner's objections, the objections to the currently pending claims are withdrawn.
4. Applicant's arguments with respect to claims 1, 13, 18, 33, and 44 have been considered but are moot in view of the new ground(s) of rejection necessitated by Applicant's amendment of said claims 1, 13, 18, 33, and 44.
5. Applicant has cancelled claims 2 and 45. Thus, claims 1, 3-44 and 46-59 are presently pending.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

> international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Kaneko et al. (US '217)(filed: Aug. 1, 1995).

Per claim 1: A layer of a liquid crystal material contained between two spaced cell wall carrying electrodes structures and an alignment treatment on at least one wall (Col. 3, Lines 54-63) characterized by means for reducing anchoring energy at the surface alignment on one or both cell walls (Col. 13, Lines 49-58) comprising an oligomer or polymer within the liquid crystal material at the cell walls (Figure 1, Film #6). The Examiner interprets the recitation "within the liquid crystal material at the cell walls" to mean that the liquid crystal is surrounded by a polymer-containing material that reduces anchoring energy (surface potential). Thus, Applicant's claim 1 reads on and is anticipated by Kaneko Figure 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneko et al. (US '217) as applied to claim 2 above and in view of Kazuhiko et al. (JP-04-269721).

Per claim 3: Kaneko does not appear to have a means for reducing anchoring energy that is an oligomer containing esters, thiols, and/or acrylate monomers within the LC material at the cell walls; however, Kazuhiko has a liquid crystal spacer bead made of polymer that has a

monomer of the group (not limited to): acrylic acid, methacrylic acid, and esters on the surface of the bead. The modified surface has a high water wettability. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kaneko in view of Kazuhiko to use an oligomer containing materials that would give it a high water wettability for the purpose of lowering surface energy.

Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneko et al. (US '217) as applied to claims 1-3 above and in view of Yamagishi et al. (US '624).

Per claims 4-6: Kaneko does not appear to have a or an oligomer of imperfect solubility in the LC material; however, Yamagishi et al. discloses a liquid crystal having solubilities different from those in a polymer and monomer respectively [Col. 2, Lines 50-55] for the purpose of making a flexible or rigid material and with varying degrees of contrast and transparency. Kaneko does not appear to have an oligomer that has a physical affinity for the surface of the cell wall; however, amphiphilic compounds (surfactants) tend to migrate to a liquid's surface and will thus have an affinity for the surface of a cell wall. Kaneko does not appear to have an oligomer or polymer that retains a substantially liquid like surface at the polymer and LC material interface; however, when an oligomer / polymer is not polymerized, it will retain a liquid-like surface at the polymer / LC material interface. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kaneko in view of Yamagishi if so desired to incorporate an oligomer or polymer of such physical properties for the purpose of affecting surface potential.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneko et al. (US '217) as applied to claims 1-6 above and in view of Onishi et al. (US '220).

Per claim 10: Kaneko does not appear to have a glass transition temperature below the operating temperature range of the device (LCD); however, Onishi et al. discloses a glass transition temperature range for a polymer resin in a liquid crystal. Onishi discloses the importance of the glass transition temperature to display quality. Display is affected by temperature and thus the glass transition temperature of both the polymer and liquid crystal must be taken into account [Col. 2, Lines 61-65]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kaneko in view of Onishi to use a polymer with a glass transition temperature lower than that of the device to ensure a high quality display

Claims 7-9 and 11-12 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kaneko (US '217) as applied to claims 1-6 and 10 above and Bryan-Brown et al. (US '264) and further in view of Wu et al. (US '533).

Per claims 7-9 and 11-12: Kaneko does not appear to address the elements of claims 7-9 and 11-12; however, in view of Kaneko, Bryan-Brown, and Wu, when an oligomer or polymer is substantially liquid-like it may also be substantially non-crystalline. Upon the introduction of an oligomer or polymer into an LC material, an increase in temperature (and or other factors) may cause the order parameter of the LC material to decrease. A change in energy can cause a phase transition which in turn will indicate whether a material is more akin to a liquid or a solid. Polymers are long, flexible molecules that can have side chains and varying repeat units.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneko et al. (US '217).

Per claim 13: Kaneko does not appear to disclose a method for the apparatus claim of claim 1; however, in light of the teachings of Kaneko and as shown in Figure 1 of Kaneko, it would have been obvious to one of ordinary skill in the art at the time the invention was made to derive the method from the Kaneko apparatus for the purpose of a reduction in the number of method steps needed to manufacture an LCD device that could reduce anchoring energy.

Claims 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneko et al. (US '217) as applied to claim 13 above and further in view of Hatano et al. (US '368).

Per claims 14-17: Kaneko does not appear to have the oligomer or short chain polymer formed by polymerization of reactive low molecular weight materials in solution in the LC fluid ... (prior to or after) ... its introduction between the cell walls ... further including the step of polymerization of reactive low molecular weight materials in the presence of an inert solvent which is then removed and the resulting polymer dissolved in the LC material prior to its introduction between the cell walls; however, Hatano discloses a composite LC and polymer material in which a composite material may be formed simultaneously with the formation of the polymer and Hatano further discloses the use of a solvent soluble with the LC material. Hatano further discloses that the additional material soluble with the LC material should be selected such that it does not impair operation of the display element including the composite material [Col. 4, Lines 50-54]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kaneko in view of Hatano to include steps of forming the polymer in the LC material solution and then to add a solvent to dissolve the polymer so as not to

interfere with the LC fluid itself for maximum switching and increased operation of the display element.

Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bryan-Brown et al. (US '459) in view of Kaneko et al. (US '217).

Per claims 18-20: Bryan-Brown has two cell walls enclosing a layer of nematic liquid crystal material (Col. 2, Lines 62-67), electrode structures on both walls for applying an electric field across the liquid crystal layer (Col. 1, Lines 11-15), a surface alignment on both cell walls providing alignment direction to liquid crystal molecules (Col. 3, Lines 6-7), and means for distinguishing between two different optical states of the liquid crystal material (Col. 3, Lines 8-9). Bryan-Brown furthermore suggests that a twisted nematic structure may be formed across the liquid crystal layer (Col. 9, Lines 41-43). Bryan-Brown furthermore suggests that the careful choice of a polymer material allows a voltage to be minimized that controls zenithal anchoring energy (Col. 9, Lines 62-63 and Col. 10, Lines 1-5). Bryan-Brown does not appear to have an oligomer or polymer within the liquid crystal material at the cell walls; however, Kaneko has a polymer in a film within / surrounding a liquid crystal surface, as noted, that reduces the surface potential. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bryan-Brown in view of Kaneko to reduce anchoring energy for efficient switching as suggested by Bryan-Brown (Col. 9, Line 62). **NOTE**: The Examiner wishes to note that the Examiner interprets "comparing" in claim 18 to mean "comprising." "Comparing" does not appear in Applicant's specification and it is believed that Applicant meant to recite "comprising."

Claims 21-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bryan-Brown et al. (US '459) and Kaneko et al. (US '217) as applied to claims 18-20 above and further in view of Bryan-Brown (US '332).

Per claims 21-25: Bryan-Brown does not appear to have the elements of claims 21-26; however, Bryan-Brown et al. (US '332 B1) discloses a means for distinguishing between two different optical states of an LC material. The use of oligomers as a technique of reducing anchoring energy has been previously noted. It would have been obvious at the time the invention was made to modify Bryan-Brown in view of Bryan-Brown as a means of reducing surface potential for a simplified process. Reduction of order parameter and phase change have been previously noted in this and in the First Office Action.

Per claim 26: Bryan-Brown does not appear to have a pretilted nematic alignment on both cell walls; however, Bryan-Brown ('332 B1) discloses a surface treatment on at least one cell wall permitting nematic LC molecules to adopt a given pretilt angle [Col. 3, Lines 19-25].

Claims 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bryan-Brown et al. (US '459) and Kaneko et al. (US '217) and Bryan-Brown (US '332) as applied to claims 18-26 above and further in view of Bryan-Brown et al. (US '264).

Per claims 27 and 28: Bryan-Brown does not appear to have the elements of claims 27 amd 28; however, Bryan-Brown (264) discloses rubbing and or oblique evaporation as alignment techniques [Col. 1, Lines 46-52] and a layer having a surface monograting with an asymmetric groove profile (USPN 5,754,264).

Claims 29-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bryan-Brown et al. (US '459) and Kaneko et al. (US '217) as applied to claims 18-28 above and further in view of Amstutz et al. (US '884).

Per claims 29-32: Bryan-Brown does not appear to have the elements of claims 29-32; however, Amstutuz has perpendicular orientation directions, director twists by about 90^0 throughout the thickness of the cell and twist angles of 90^0 [Col. 1, Line 55], greater than 180^0 and less than 360^0, Amstutz discloses LC twists of equal to or greater than 180^0 and less than 360^0 [Amstutz, Col.2, Lines 22-23] and nematic LC material that contains a small amount (<5%) of a chiral dopant material Amstutz discloses the use of a chiral dopant to obtain a given thickness to pitch ratio. The level of chiral dopant is selected to obtain a natural pitch and to obtain given desired twist angles. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bryan-Brown in view of Amstutz to vary chiral dopant to obtain desired twist angles. Furthermore, it is often desirous to use small amounts of chiral dopants (as opposed to large amounts) because (1) chiral dopants are expensive and difficult to synthesize, (2) they can negatively affect LC properties (when used in large amounts) such as: dielectric anisotropy, viscosity, driving voltage, or switching times (Parri et al. USPN 6,217,792 B1).

Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bryan-Brown et al. (US 459) and Kwon et al. (US '818) in view of Kaneko et al. (US '217).

Per claim 33: Bryan-Brown has a bistable nematic LCD comprising two cell walls enclosing a layer of nematic, liquid crystal, electrode structures on both walls, a surface alignment on one or both cell walls providing two alignment directions to liquid crystal

molecules with an amount of surface pretilt, and means for distinguishing between switched states of the liquid crystal material (Col. 3, Lines 1-9). Bryan-Brown does not appear to have a means for reducing azimuthal anchoring energy; however, Kwon specifically teaches that by appropriate exposure of a photosensitive polymer, it is possible to control the direction of the easy orientation axis on the aligning surface and the azimuthal anchoring energy value (Col. 2, Lines 1-10). Thus, Kwon suggests that a polymer can be used to affect aziumthal anchoring energy. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bryan-Brown in view of Kwon for a liquid crystal alignment that does not produce electrostatic charges and dust on the alignment surface (Col. 2, Lines 1-10). Bryan-Brown does not appear to have an oligomer or polymer within the liquid crystal material at the cell walls for reducing azimuthal anchoring energy; however, Kaneko has a polymer film as noted that is within the liquid crystal material at the cell walls (Figure 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bryan-Brown in view of Kaneko to reduce anchoring energy for efficient switching as suggested by Bryan-Brown (Col. 9, Line 62).

Claims 34-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bryan-Brown et al. (US 459) and Kwon et al. (US '818) and Kaneko et al. (US '217) as applied to claim 33 above and further in view of Bryan-Brown et al. (US '264) and Bryan-Brown et al. ('332 B1) and further in view of Wu et al. (US '017 B2).

Per claims 34-43: Bryan-Brown does not appear to have the elements of claims 34-43; however, Bryan-Brown (332) and Wu have these elements as previously noted. Oligomers or short chain polymers as means for reducing anchoring energy have been previously addressed,

an amount up to 10% by weight in the LC material and chain length is less than 100 repeat units, and the use of a small amount of oligomer / polymer and short chain length to reduce anchoring energy (as opposed to the use of a large amount) is necessary in order to not interfere with the LC material and has been previously addressed. Parameters of type, concentration, chain length, are arranged to reduce the LC order parameter at or adjacent the cell wall. A material precured (prior to / after) introduction between the cell walls and alignment is provided by a bigrating surface and changing order parameter or phase has been previously addressed.

Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bryan-Brown et al. (US '264) in view of Kaneko et al. (US '217).

Per claim 44: Bryan-Brown has a smectic liquid crystal material between two walls bearing electrodes and surface treated to give both alignment and surface tilt to liquid crystal molecules (Col. 2, Lines 15-23). Bryan-Brown does not appear to have an oligomer or polymer within the liquid crystal material at the cell walls for reducing anchoring energy; however, Kaneko has a polymer film as noted that is within the liquid crystal material at the cell walls (Figure 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bryan-Brown in view of Kaneko to reduce anchoring energy for efficient switching as suggested by prior teachings of Bryan-Brown et al.

Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bryan-Brown et al. (US '264) and Kaneko et al. (US '217) as applied to claim 44 above and further in view of Kazuhiko et al. (JP-04-269721).

Per claim 46: Bryan-Brown does not appear to have the elements of claim 46; however, Kazuhiko has a liquid crystal spacer bead made of polymer that has a monomer of the group (not

limited to): acrylic acid, methacrylic acid, and esters on the surface of the bead. The modified surface has a high water wettability. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kaneko in view of Kazuhiko to use an oligomer containing materials that would give it a high water wettability for the purpose of lowering surface energy.

Claim 47-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bryan-Brown et al. (US '264) and Kaneko et al. (US '217) as applied to claims 44-46 above and further in view of Yamagishi et al. (US '624).

Per claims 47-50: Bryan-Brown does not appear to have a or an oligomer of imperfect solubility in the LC material; however, Yamagishi et al. discloses a liquid crystal having solubilities different from those in a polymer and monomer respectively [Col. 2, Lines 50-55] for the purpose of making a flexible or rigid material and with varying degrees of contrast and transparency. Bryan-Brown does not appear to have an oligomer that has a physical affinity for the surface of the cell wall; however, amphiphilic compounds (surfactants) tend to migrate to a liquid's surface and will thus have an affinity for the surface of a cell wall. Bryan-Brown does not appear to have an oligomer or polymer that retains a substantially liquid like surface at the polymer and LC material interface; however, when an oligomer / polymer is not polymerized, it will retain a liquid-like surface at the polymer / LC material interface. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bryan-Brown in view of Yamagishi if so desired to incorporate an oligomer or polymer of such physical properties for the purpose of affecting surface potential.

Claims 51 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bryan-Brown et al. (US '264) and Kaneko et al. (US '217) as applied to claims 44-50 above and in view of Bryan-Brown (US '264) and further in view of Wu et al. (US 533).

Per claims 51 and 52: Bryan-Brown does not appear to have the elements of claims 51 and 52; however, as noted with respect to claims 8 and 9 in light of Bryan-Brown and Wu, when an oligomer or polymer is substantially liquid-like it may also be substantially non-crystalline. Upon the introduction of an oligomer or polymer into an LC material, an increase in temperature (and or other factors) may cause the order parameter of the LC material to decrease. A change in energy can cause a phase transition which in turn will indicate whether a material is more akin to a liquid or a solid. Polymers are long, flexible molecules that can have side chains and varying repeat units.

Claims 53-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bryan-Brown et al. (US '264) and Kaneko et al. (US '217) as applied to claims 44-52 above and further in view of Coulson (WO 87 / 06020).

Per claims 53-59: Bryan-Brown does not appear to have the elements of claims 53-59; however, Coulson (WO 87 / 06020) discloses a bistable chiral smectic liquid crystal device in which the alignment directions may be parallel in the same or opposite directions. Coulson further discloses that a chiral mixture may be added to a non-chiral or racemate LC material. It would have been obvious, at the time the invention was made, to further include a smectic A material because when a liquid crystal is in a chiral nematic phase, and has smectic phases present, these phases may be either smectic A or smectic C. It would have been obvious, at the time the invention was made to modify Bryan-Brown in view of Coulson to further include a

means for reducing surface energy to affect tilt and pitch. Coulson (WO 87 / 06020) further discloses that the alignment directions may be parallel thus suggesting that the alignment directions may be non-parallel. The use of a grating surface and or a rubbed polymer surface to affect alignment is commonly done in the art of LC molecular alignment. Bryan-Brown (WO 97 / 14990) discloses that a cell wall may have no alignment direction and discloses a surface treatment on another cell wall.

Conclusion

Based upon Applicant's amendments and cited prior art of record, Applicant has not placed this application in condition for allowance and has not distinguished over the prior art.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeanne A. Di Grazio whose telephone number is (703)305-7009. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim, can be reached on (703) 305-3492. The fax phone numbers for the organization where this application or proceeding is assigned are (703)746-8741 for regular communications and (703)746-8741 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

Jeanne Andrea Di Grazio

Robert Kim, SPE

JDG
May 4, 2003

TOANTON
PRIMARY EXAMINER